

## Stevens County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/30/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 17 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Stevens County economy.<sup>1</sup>

These 17 sectors have a total direct output of approximately **\$223.3 million** and support **475.2 jobs** in Stevens County. Running the model for all 17 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Stevens County Economy						
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product
Direct Effect	475.2	14.35%	\$48,331,656	18.85%	\$223,340,747	87.12%
Indirect Effect	370.2	11.18%	\$30,504,409	11.90%	\$45,290,588	17.67%
Induced Effect	97.8	2.95%	\$6,938,563	2.71%	\$12,804,180	4.99%
<b>Total Effect</b>	<b>943.3</b>	<b>28.48%</b>	<b>\$85,774,628</b>	<b>33.46%</b>	<b>\$281,435,515</b>	<b>109.79%</b>

As shown in the above table, agriculture, food, and food processing sectors support **943.3 jobs**, or **28.48%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$281.4 million, roughly 109.79% of the economy.**

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 17 agriculture, food, and food processing sectors is approximately **\$85.8 million, or 33.46% of the GRP.** This indicates that personal income, business income, and taxes generated by these sectors account for **33.46% of the total economy.**

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

[http://www.implan.com/index.php?option=com\\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70](http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the support activities for agriculture and forestry sector is the top employer with **213.9 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Stevens County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Support activities for agriculture and forestry	213.9	\$22,566,651
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	177.9	\$48,481,959
Grain farming	167.5	\$122,165,094
Animal production, except cattle and poultry and eggs	31.9	\$6,794,538
Fluid milk manufacturing	30.2	\$25,490,062
Real estate	29.1	\$1,890,268
Truck transportation	28.8	\$5,076,723
Wholesale trade	27.4	\$5,809,825
All other crop farming	20.5	\$3,131,080
Vegetable and melon farming	16.1	\$3,190,533

The grain farming sector directly contributes approximately **\$122.2 million** to the Stevens County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Grain farming	167.5	\$122,165,094
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	177.9	\$48,481,959
Fluid milk manufacturing	30.2	\$25,490,062
Support activities for agriculture and forestry	213.9	\$22,566,651
Animal production, except cattle and poultry and eggs	31.9	\$6,794,538
Oilseed farming	2.7	\$6,549,624
Wholesale trade	27.4	\$5,809,825
Truck transportation	28.8	\$5,076,723
Owner-occupied dwellings	0.0	\$4,193,859
Dairy cattle and milk production	11.4	\$3,857,679

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Stevens County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	2.7	\$6,549,623.97
Grain farming	167.5	\$122,165,092.47
Vegetable and melon farming	16.1	\$3,190,532.92
Fruit farming	0.3	\$20,681.49
Tree nut farming	0.0	\$23.56
Greenhouse, nursery, and floriculture production	2.0	\$233,023.52
Cotton farming	5.4	\$1,391,956.09
All other crop farming	20.5	\$3,131,080.39
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	177.9	\$48,481,956.48
Dairy cattle and milk production	11.4	\$3,857,678.89
Poultry and egg production	0.4	\$361,225.04
Animal production, except cattle and poultry and eggs	31.9	\$6,794,538.02
Fluid milk manufacturing	30.2	\$25,490,060.81
Bread and bakery product, except frozen, manufacturing	2.0	\$234,501.84
Frozen cakes and other pastries manufacturing	0.1	\$17,019.46
Fiber, yarn, and thread mills	3.3	\$1,071,985.84
Veterinary services	3.5	\$349,760.44

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Stevens County, the retail sector was omitted.